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LOGISTICS DURING GRANT'S VICKSBURG CAMPAIGN

BY

Lieutenant Colonel Edwin L. Buffington United States Army

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LOGISTICS DURING GRANT'S VICKSBURG CAMPAIGN
AN INDIVIDUAL STUDY PROJECT

ΒY

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Colonel Charles E. Heller Project Advisor

U.S. Army War College Carlisle Barrack, Pennsylvania 17013

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#### ABSTRACT

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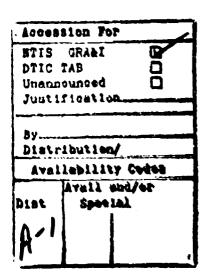
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Two campaigns fought 128 years ago decisively influenced the outcome of the American Civil War. Both Vicksburg and Gettysburg campaigns ended on the same day. July 4, 1863, with Union victories. The focus of this paper is on the Vicksburg campaign and the logistics support plan of Major General Ulysses S. Grant. In January 1863. Grant and his army were on the west bank of the Mississippi River across from Lieuten ant General John C. Pemberton and the Confederate army at Grant tried desperately to get to the rear of Vicksburg. Vicksburg. When a series of cleverly conceived plans to bypass the Vicksburg guns by digging canals proved useless, he devised a plan to cross the river to attack Vicksburg from the Against the advice of one of his corps commanders. Major General William T. Sherman, and with a strong Confederate force on his flank. Grant cut loose from his supply base and plunged into hostile territory toward strongly held Vicksburg. With no support and unencumbered by lines of communications, he moved out with five days' rations per soldier. They lived off the land and carried their ammunition in commandeered wagons. Grant divided his logistical elements into "combat trains" and "field trains," enabling him to operate freely without restrictive supply lines. defeating the Confederates at Raymond, he turned and struck eastward at Jackson. By moving swiftly, he was able to defeat General Joseph E. Johnston at Jackson and then faced westward and swept toward Vicksburg before Pemberton could react. Pemberton's surrender, after a 47 day siege, marked the turning point of the Civil War. This victory was achieved by a bold, aggressive commander, whose campaign bears all the earmarks of modern warfare. Grant crossed one of America's most imposing terrain barriers, the Mississippi River, cut loose from his supply bases, and exploited his crossing in a rapid 20 day. 200 mile sweep over terrain much rougher than that encountered by many previous and future generations of American soldiers.

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#### CHAPTER I

#### INTRODUCTION

Two campaigns fought 128 years ago decisively influenced the outcome of the War Between the States. Both Vicksburg and Gettysburg campaigns ended on the same day. July 4, 1863, with Union vistories. However, most historic accounts focus on the battles, yet in both campaigns, logistics played a decisive role. This paper focuses on the Vicksburg campaign which illustrates the strategic, tactical, and logistic brilliance of Major General Ulysses Simpson Grant.

Vicksburg was, in the era of the Civil War, referred to as the "Hill City" and the "City of Terraces" by Ralph Waldo Emerson and President Millard Fillmore. To Jefferson Davis, who called it the "Gibraltar of the West", it was important to the Confederacy because it occupied the first high ground. "Walnut Hills", on the east side of the Mississippi River below Memphis. As long as the Confederacy had control of the Mississippi, free navigation by the Union was prevented. If the North could gain control of the Mississippi and out the Confederacy in half, it could harm the South's attempt at recognition by European powers. Also by splitting the Confederacy down the middle, the North could cut off the supply of food from Texas and the shipment of materiels which entered that state by way of Matamoros, Mexico. If the Confederacy succumbed, Texas would ultimately fall and

thousands of Confederate troops would be left stranded west of the Mississippi where they would have no influence on the 3 future of the war.

Many historians view the American Civil War as the nation's first modern war. Both the Union and the Confederate armies employed technological innovations created by the Industrial Revolution and converted to military application. The railroad, telegraph, steamboat, balloon, submarine and machine gun are but a few examples of the advances that typified the tools available to create a modern logistics base. These advances and many more innovations altered traditional concepts of conducting war. European military thought greatly influenced both Union and Confederate officers. As a result, American logistic service practices resembled the magazine supply concept popular in post-Napoleonic Europe. This system permitted armies to operate from pre-positioned military supply depots. Depots were normally located along or connected to railroads and waterways, major road networks and, at times, near commercial centers. Smaller forward bases supplied ammunition, issued rations and equipment, and provided medical care. Closer to the area of operations, regimental supply base personnel and quartermaster officers exchanged orders via dispatch riders and later by telegraph, and forwarded supplies using wagon trains, sometimes with

divilian contract teamsters. During most of the Civil War, field armies on both sides were supported by this system of logistics.

In two campaigns, the Union army departed from the American magazine system. Grant's capture of Vicksburg and Major General William T. Sherman's famous march to the sea were two exceptions to the standards of the day. Both Grant and Sherman were unorthodox and audacious in their decisions to separate the main army from the supply bases, maintaining no lines of communication and relying on the countryside for subsistence. Although Sherman's campaign is interesting from the standpoint of strategy. Grant's Vicksburg campaign provides more logistics lessons. It is a prime example of how major logistic operations can influence decisions at the tactical level.

The focus of this paper is on logistics during the Vicksburg campaign. The reader will see that this one aspect of the campaign was a remarkable strategic success. One which I believe was more devastating and decisive than Gettysburg. Vicksburg was an expedition overshadowed by presidential anxiety, resupply difficulties and early stagnant operations. Through good generalship, the campaign resulted in a stunning victory. It was, perhaps, Grant's best campaign. His success at Vicksburg can be directly attributed to both his understanding of the Union army's

logistics and the ramification of his decisions.

Mich attention has been paid to the logistics genius of notable personages as Sun Tzu Wu. Alexander the Great.

Marguis de Louvois, and Napoleon, but I believe one of the greatest logisticians to be added to the list is Ulysses S.

Grant. Under pressure from the Northern press. Congress, and his military superiors. Grant made a daring move cutting his army off from its logistics support base. He implemented a deception plan and then crossed one of America's most imposing terrain barriers, the Pississippi River. Grant then exploited his crossing, which was an audacious plan requiring mobility and skillful combined arms teamwork and in 20 days travelled over 200 miles of rough terrain, fighting five major battles, while sustaining his force of 43,000 men.

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#### CHAPTER II

#### GRANT--THE MAKING OF A LOGISTICIAN

A look at Grant's military and civilian experience before Vicksburg shows that he was not a novice logistician. Reared in rural Ohio on a farm, roads were often in poor condition and he learned of their effects on time and distance while delivering supplies for his father. He knew that a six horse wagon could carry 2,000 pounds, and a horse on the move consumed 25 pounds of food each day while mules in needed 23 pounds. Thus, previous to entering the U.S. Military Academy in 1839, he had gained a practical knowledge of wagons, horses, river currents, effects of flooding, barge loading, and men. He understood support factors before the military taught him how to look them up and calculate logistics estimates.

Because of his class standing. 21st out of 39 cadets in the USMA Class of 1843, he was denied entry into the Corps of Engineers, the cavalry, or the faculty. So with those on the lower end of the scale, he was assigned to the infantry. As the junior officer in the 4th U.S. Infantry, he became the regimental quartermaster and commissary officer, equivalent 3 to today's S-4, logistics.

As the regimental S-4, he negotiated contracts for most non-military supplies and equipage directly with local businessmen and farmers for horses, food, wagons, teamsters.

billets and other supplies and services. Grant also operated the regimental bakery so efficiently that he was able to sell excess bread and use the profits to buy additional rations for the men and fodder for the horses.

During the Mexican War. Grant continued to serve as the regimental logistics officer. When Major General Winfield Scott landed U.S. troops at Veracruz. Mexico and marched to Mexico City. Grant observed first hand how a senior commander had to understand and directly control his logistics operation. Scott reduced the number of supply wagons accompanying his troops and dictated what remaining wagons would carry: thereby, increasing the speed of the army's movement. He required the soldiers to forage for subsistence for themselves and their animals as they moved across Mexico. This experience, combined with his civilian transportation knowledge, undoubtedly influenced Grant's thinking as he planned the logistics support of his armies during the Civil War.

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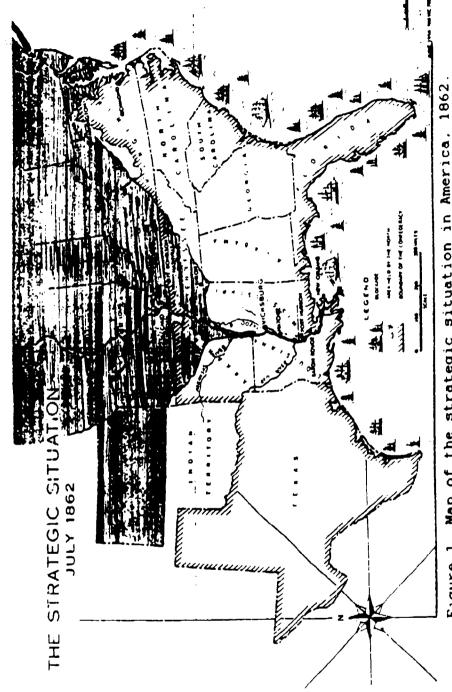
#### CHAPTER III

#### VICKSBURG'S STRATEGIC IMPORTANCE

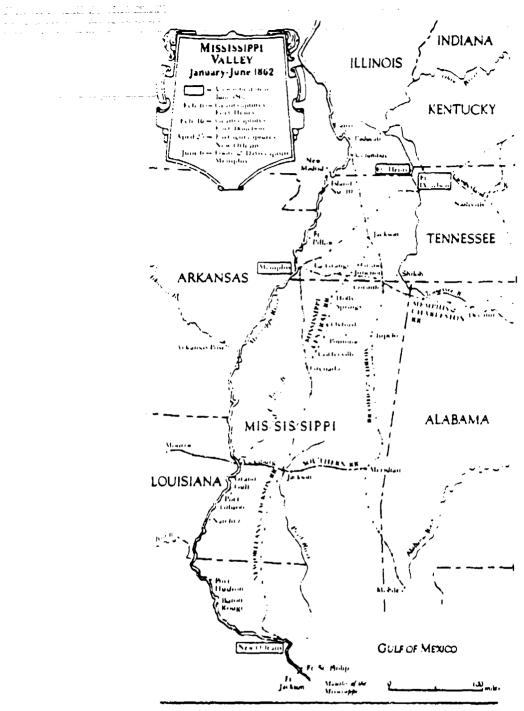
When the Civil War commenced, the Mississippi River, from the mouth of the Ohio River to the Gulf of Mexico, fell into the hands of the Confederates. Realizing its strategic importance led Southerners to make every effort to retain the great commercial highway. However, as the Confederate line of defense fell back before the advance of Grant's army, the strategic outposts of the Confederacy dwindled before the joint movement of Union land and naval forces, thus leaving New Orleans and Vicksburg as the only places on the river that offered any serious resistance to Union forces.

New Orleans, located one hundred miles above the mouth of the Mississippi, was the South's largest city. It was guarded by Fort Jackson on the west bank and Fort St. Philip on the east. Prior to the war, it possessed the largest export trade of any city in the world. Its available resources could support modern warfere, to include workshops where the tools of war could be built by artisans capable of not only casting guns and making small arms, but building ships as well.

After a massive combined land and naval operation. in conjunction with Grant's victories up river. New Orleans surrendered on April 29, 1862. Following the fall of New Orleans. Baton Rouge and Natchez were taken, as well as every



William C. Everhart, Vicksburg National Military William C. Everhart, Vicksburg National Military Figure 1. Map of the strategic situation in America. Washington, D.C.: Park, Mississippi, 1954. 5. Office, Source:



 $\cdots \stackrel{\cdot}{\cdot}_{i_1}\cdots \stackrel{\cdot}{\cdot}_{i_r}=0 \text{ and } \stackrel{\cdot}{\cdot}_{i_r}$ 

Figure 2. Map of Mississippi Valley January-June 1863. Source: Samuel Carter. III. The Final Fortress: The Campaign for Vicksburg 1862-63. St. Martins Press New York, 1904.

town if any importance as far north as Vicksburg. The fall of Memphis in June 6, 1862, left only the Confederate stronghild of Vicksburg. Its capture was necessary to open the great highway to the West, and sever the Confederacy.

Vicksburg had been the object of Union attention since the start of the war. Abraham Lincoln knew its importance when he declared. "We can take all the Northern ports of the Confederacy, and they can still defy us from Vicksburg." To emphasize his statement, he pointed out that. "It means hogs and hominy without limit, fresh troops from all the states of the far South, and a cotton country where they can raise the staple without interference." In the eyes of Mr. Lincoln, it was the key to control the mighty Mississippi, and the Civil War could not be won, "until the key is in our pocket." Confederate President Jefferson Davis called it. "the nailhead that held the South's two halves together."

In September 1862. Major General Henry W. Halleck. who was in command of the Department of the Mississippi, was called to Washington to assume the position of the Union Army's General—in-Chief and, in doing so, left Grant in command of the Department. Grant was required by Halleck to guard the railroad from Memphis to Decatur, 200 miles in length, and keep communications open with Major General Don C. Buell who was on his way to Kentucky to oppose General Braxton Bragg's army. This fragmented his army and the

multiple missions imposed by Halleck constrained Grant to adopt a defensive posture.

Ey lotober 1862. Grant received sufficient reinforcements to believe himself strong enough to attempt the advance on Vicksburg, the object of his long range plan. He planned to abandon his base at Corinth, destroy the area's railroad system, concentrate his forces at Grand Junction and then move on Vicksburg by way of the Mississippi Central 7 Railroad. On October 26. Grant wrote Halleck of his intended campaign and requested permission to move. The plan was not approved for a full month, further delaying Grant's movement.

Grant's advance along a line parallel to the Mississippi became more difficult that his previous advancements, which had been a series of moves to conquer fortified position by the indirect approach obtaining victories at distant points to outflank the main enemy force. Because of the increased length of his lines of communication, what had been initially comparatively easy became extremely difficult. To fully appreciate the importance of manageable lines of communication, one must consider the complex task of supplying the Union army and how restricted their movements were while moving through enemy country.

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### CHAPTER IV

In the densely populated countries of Europe, an army could often subsist upon the country through which it marched. In America, this was seldom the case for the Union armies in the Confederacy. Supplies, such as rations, ammunition, and uniforms had to be brought with them, and it was seldom possible for them to move more than a few miles from the lines of supply. To analyze this further, consider that the population density of France, in the Napoleonic era, was about 140 persons per square mile or thirty million people within 212,000 square miles. In the Confederacy (excluding Texas and West Virginia), there were about 17 persons per square mile or 8.123.000 people within 470.630 square miles. The amount of forage and food available in a given area is proportional to the density of population: therefore, it can be reasoned that the low density of population in the South severely limited the size of an army living off the country.

A 100.000 man army in France would be expected to subsist for 15 days in an area of 710 square miles or a square 26.5 miles on a side. In the Confederacy, 5.800 square miles would be required for subsistence or a square 77 miles on a side. For Grant's army of 45.000, subsisting in the Confederacy would require 2.610 square miles or a square

35 miles on a side, which would necessitate more horses, wagens and foragers because the distance to forage would be greater.

A second consideration is the fact that the ratio of animals to men varied widely in the Civil War armies. At the beginning of the war in the United States, there were about four persons for each horse or mule. Armies with more than one animal per four men would be expected to make a heavier drain on the forage area.

The Civil War commander could estimate the requirements of his army and the maximum area available for foraging fairly well, but the amount of forage to be obtained in the area was always uncertain. The forage available depended on the length of time since harvest, the presence of railroads and canals to drain off the productive regions. as well as the impact of previous foraging. According to an article in the Summer 1960 edition of Military Affairs entitled. "Mobility and Strategy in the Civil War." the author concludes from a comparison of planning values. (see Table 1) with a map of population density from the Census of 1960. that "Civil War era armies of less than 10-15,000 could live by foraging in most sections of the South almost indefinitely. Armies of 20-30,000 were restricted to rich areas and armies of 50,000 or more, a railroad was a necessity, except for short periods."

#### FIGURE 3

COMPARISON OF FORAGE AREAS AND WAGON REQUIREMENTS IN NAPOLEONIC FRANCE AND THE CONFEDERACY FOR ARMIES CONTAINING ONE HORSE TO FOUR MEN EXCLUSIVE OF TEAMS USED IN COLLECTING FOOD AND FORAGE FOR A FIFTEEN-DAY PERIOD.

The size of the army is given in thousands of men: the requirements in thousands of pounds. The radius to the forage area is given in days' march with the value in miles in parentheses. Wagon loads are figured at 4000 pounds and the daily march of wagons is equal to 20 miles in France; whereas, wagon loads and wagon marches equals 3000 pounds and 15 miles a day in the Confederacy. Thus, 200,000 men in the Confederacy cannot be supplied by the forage system outlined.

Reqmt	Radius o France	f Foraging Confederacy	Wagons F.	Req'd	Wagon: F.	s/1000 C.
80	.32 (6)	1.26 (19)	13	75 230	1.3	7.5 11.4
240	,56 (11)	2.28 (34)	69	450	2.3	14.9
320 400	.65 (13) .72 (14)	2.69 (41) 3.08 (46)	-		3.0	18.3 21.8
600 800	.89 (18) 1.03 (21)	3.95 (59) 4.81 (72)			3.8 4.4	30.8 41.8
1200 1600	1.27 (25) 1.48 (30)	7.00 (105)	830 1: 1300 -	2750 	5.5 6.3	85.1 
	80 160 240 320 400 600 800 1200	France  80 .32 (6) 160 .45 (9) 240 .56 (11) 320 .65 (13) 400 .72 (14) 600 .89 (18) 800 1.03 (21) 1200 1.27 (25)	France Confederacy  80 .32 (6) 1.26 (19) 160 .45 (9) 1.82 (27) 240 .56 (11) 2.28 (34) 320 .65 (13) 2.69 (41) 400 .72 (14) 3.08 (46) 600 .89 (18) 3.95 (59) 800 1.03 (21) 4.81 (72) 1200 1.27 (25) 7.00 (105)	France Confederacy F.  80 .32 (6) 1.26 (19) 13 160 .45 (9) 1.82 (27) 37 240 .56 (11) 2.28 (34) 69 320 .65 (13) 2.69 (41) 108 400 .72 (14) 3.08 (46) 151 600 .89 (18) 3.95 (59) 282 800 1.03 (21) 4.81 (72) 440 1200 1.27 (25) 7.00 (105) 830 13	France Confederacy F. C.  80 .32 (6) 1.26 (19) 13 75 160 .45 (9) 1.82 (27) 37 230 240 .56 (11) 2.28 (34) 69 450 320 .65 (13) 2.69 (41) 108 730 400 .72 (14) 3.08 (46) 151 1090 600 .89 (18) 3.95 (59) 282 2320 800 1.03 (21) 4.81 (72) 440 4180 1200 1.27 (25) 7.00 (105) 830 12750	France         Confederacy         F.         C.         F.           80         .32         (6)         1.26         (19)         13         75         1.3           160         .45         (9)         1.82         (27)         37         230         1.9           240         .56         (11)         2.28         (34)         69         450         2.3           320         .65         (13)         2.69         (41)         108         730         2.7           400         .72         (14)         3.08         (46)         151         1090         3.0           600         .89         (18)         3.95         (59)         282         2320         3.8           800         1.03         (21)         4.81         (72)         440         4180         4.4           1200         1.27         (25)         7.00         (105)         830         12750         5.5

Source: John G. Moore, "Mobility and Strategy in the Civil War", Military Affairs, Summer 1960, 73.

As uncontant element of Civil War logistics was the emistable of railroads, navigable rivers and sea ports which hould extend the forage area indefinitely. In theory, a large army could remain at a railhead indefinitely. most dramatic effect of railroads on strategy was on the dispersion at the beginning of a campaign. In the Civil War. dispension of forces from a railhead increased supply difficulties instead of reducing them. Even when especially desirable, they were limited to three to five days wagon march, resulting in lateral lines of communication often being subject to attack and interrupted by the enemy. However, indispensable as railroads were in supplying armies during campaigns, they were far inferior to rivers in respect to security. Aided by gunboats, the Union armies could advance to any distance along the banks of a navigable river. obtain supplies promptly from barges and river steamboats. Although railroads were lines of communication to remote areas, security problems rapidly increased in proportion to their length, since it was easy for the enemy's cavalry to make bold incursions in the rear of the Union armies and tear up the track for miles. The effect of such a sudden stoppage of supplies was enough to paralyze all military operations. To guard against these dangers was one of the most difficult tasks of Union commanders, especially in the western theater of war.

An adequate railroad solved the supply problem in a garrison, but to maneuver and advance an army depended largely on the supplies it carried. Horse-drawn transport was the primary means. However, wagons used were usually inadequate for transporting the supplies of an army. It is important to consider the capacity and length of time an army could remain out of touch with its supply base. There were two methods of carrying supplies from a supply base to the front. The first is the "supply train method" which is a continuous supply with the wagons moving from the supply base to the front and returning. "The expedition method" is when all the wagons of an army are loaded with supplies and accompanies the army on its advance. Both methods created difficulties. The "supply train" is in danger of attack by enemy cavalry. On the "expedition" the army must return after a limited period, in which case the large wagon train limits the length of the campaign.

The magnitude of moving supplies under the conditions existing during the Civil War can best be illustrated by some simple arithmetic. To supply an army of 50.000 men. at two days march from its supply base, required 400 wagons. An army that size required at least 8.000 horses for its cavalry and artillery, and each of these animals "consumed 26 pounds of forage daily", which made a load for another 400 wagons. These 800 wagons were drawn by 4.800 mules or draught horse.

which is turn required 180 wagons to carry their forage. These 181 wagons were drawn by 1,080 animals, which were fed by 48 additional wagons.

Thus. Grant's army in December 1862 needed nearly 1,100 wagons, drawn by 6,000 animals to keep it supplied at two days march from its base, where at three days march, nearly 8,1,900 wagons, drawn by 11,000 animal were required. He then could not travel more than two or three days without shifting his supply base. Obviously, these supply bases must have access to a river or railroad to assist in the transportation of materiel and supplies from permanent supply bases established in a secure Union region.

A single wagon with six mules or draught horses.

carrying a load of 2.000 pounds, which was the standard load.

supplied 500 men. If the army was one days march from its

base so that the wagon could come one day and return empty

the next, it could only supply 500 men every alternate day.

10

or 250 men daily. If the army were two days march from its

base, each wagon could only furnish supplies at the rate of

11

125 men daily, or four wagons to 500 men.

Napoleon once said. "Every army moves, like a serpent. 12 upon its belly." The individual coldier was expected to carry much of what he would need for at least several days. The weight of food, ammunition, and other supplies required 13 by each soldier average 4 pounds daily. By regulation, the

brigade was authorized a portable oven and cooking
14
utensils. The cooking items available for the individual
soldier were coffee pots and frying pans, all that was really
15
needed to prepare a meal.

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#### ENDNOTES

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#### CHAPTER V

#### THE CAMPAIGN

In early December 1862. Grant rapidly moved his army toward Oxford. Mississippi paralleling good rail lines. He jumped his logistic support forward as required by doctrine to establish an intermediate supply base 180 miles from 1 Columbus, the army's permanent supply base. This was the first and only time that Grant was to rely on the railroad for support. However, it was impossible to guard this long line of communication, as evidenced on December 11, when Confederate Brigadier General Nathan B. Forrest, with 2.500 cavalrymen, crossed the state of Tennessee and cut Grant's communication. Forrest destroyed sixty miles of railroad and cut telegraph lines which isolated Grant from his base and 2 the rest of the world from December 19 until December 30.

At the same time. Confederate Major General Earl Van
Dorn with his cavalry of 3,500 strong, attacked Grant's rear
at Holly Springs where a great mass of supplies, valued at
over one million dollars, was stockpiled for the Union army.

Van Dorn destroyed Grant's accumulated stores of munitions,
rations, and forage, as well as capturing the garrison of
4
1.500 men. Forrest destroyed the only road by which Grant
could expect to receive replenishment of these supplies. The
two Confederate raids left Grant "completely paralyzed"

demonstrating the extreme difficulty in maintaining such a

long line of communication through enemy territory.

At this point, there was nothing else for Grant to do but retreat to Grand Junction and reconstitute his force. To support the army on the retreat, it was necessary for Grant to experiment living off the countryside. The story is told that some neighboring women came to Grant's headquarters and tauntingly asked him where he expected to get food for his soldiers. He quietly reminded them that their barns and granaries seemed to be well stocked. "What!" they exclaimed. "you surely would not lay hands on private property!" Grant regretted the necessity, but assured them that they must not expect him to starve his army on their account. Preparing for his move, Grant ordered all wagons dispatched, under escort, to collect and bring in all supplies of forage and food from a region of fifteen miles east and west of the road from his front, back to Grand Junction, leaving two months supplies for the families of those whose stores were taken. Grant later stated in his memoirs. "I was amazed at the quantity of supplies the country afforded. It showed that we could have subsisted off the country for two months instead of two weeks without going beyond the limits designated. This taught me a lesson which was taken advantage of later in the campaign when our army lived twenty days with the issue of only five days rations by the commissary. Our loss of supplies was great at Holly

Springs but it was more than compensated for by those taken grow the country and by the lesson taught."

On January 8, 1863, receiving a dispatch from General Halleck directing him to move all available forces to Vicksburg, Grant marched his army to Memphis to begin planning and preparations for movement. With St. Louis and Chicago serving as his principal major industrial support bases. Grant would use the Mississippi River as his primary 10 line of communications.

By mid-January, Grant had his army on the west bank of the Mississippi across from Lieutenant General John C. Pemberton and his Confederate army at Vicksburg. Grant's dilemma at this point was terrain. The Mississippi River. the most crooked of all the great rivers of the world. requires boats to transverse as much as thirty miles to reach a point ten miles in a straight line from its starting place. The river basin is a dense forest of cypress trees. It is intersected by a network of bayous and sluggish streams, as crooked as the Mississippi itself, spanning as much as twenty miles on either side of the river. Although such terrain suggest that armies cannot maneuver and fortifications cannot be erected, there are a few notable exceptions such as Columbus. Memphis. Grand Gulf. Port Hudson, and Vicksburg, where bluffs rise from 80 to 200 feet above the river, with Vicksburg being the most formidable.

For an amphibious force. Vicksburg appeared inaccessible, and to an army as difficult.

Between Vicksburg and Port Hudson, the Mississippi River is joined from the west by the Red River, the great highway that connected the states of Texas. Louisiana, and Arkansas with the central and eastern sections of the Confederacy. The capture of these two fortresses would out off the great granary that supplied food to the Confederacy. Mississippi, between these two points, was entirely in Confederate hands denving the Federal fleet passage above Port Hudson and below Vicksburg. Grant's Union army could not land on the east bank of the river without being cut off from its source of supplies. Haines' Bluff, twelve miles above Vicksburg. "commands all the river approaches" to the city and because of its strong fortification, rendered Vicksburg inaccessible via river from the north. Therefore, Vicksburg could only be assailed from the rear through rugged country, broken by deep ravines, presenting a formidable obstacle to an enemy. As Grant developed his plan, his dilemma and most arduous task was how to gain a foothold on Vicksburg's bluffs and lift his army and material out of the Mississippi marshes.

Grant's army was limited in terms of engineers with experience, but during the winter and spring of 1863, these soldiers became one of his most important combat multipliers.

Engineer units, assisted by fatigue parties from the infantry commands, black work gangs, and pioneer companies from the infantry divisions that had them, attempted river diversions, dredged, fought floods, built roads and bridges through swamps, launched amphibious operations, built fortifications, and attacked enemy works by sap, mine, and other classic siege operations. The logistics required to support this engineer effort was tremendous when compared to similar tasks with today's equipment, materials, and technology.

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What he wanted it to in order to establish a supply base north of Vicksburg. His first plan was to induce the Mississippi River to bypass Vicksburg entirely, so he could transport needed men and equipment below the well guarded city. The neck of the river bend opposite Vicksburg was relatively narrow, thus Grant's intent was to excavate a channel across this narrow point; however, when the river stage fell, his project failed because his excavation equipment was not adequate to complete the cutoff channel to the new depth.

The second plan involved a cutoff and the use of a distributary channel, about 50 miles below Vicksburg, where Lake Providence, fed by the navigable Tensas. Washita. Black and Red Rivers, emptied into the Mississippi. By moderate digging, Grant expected to connect the Mississippi and the

#### THE BAYOU EXPEDITIONS

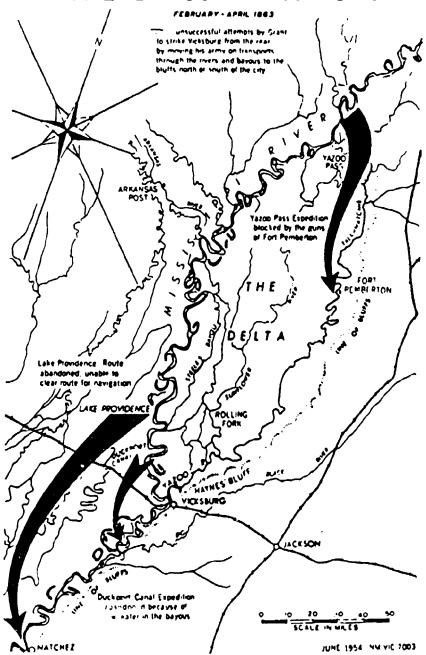


Figure 3. Map of Grant's Bayou Expeditions of February-April 1863. Source: William C. Everhart. Vicksburg National Military Park, Mississippi, 1954. 13.

lake, toping it would wash a channel, but this failed also.

Grant's third plan involved cutting a levee on the east side of the river at Yazoo Pass. The idea was to cut the levee that blocked the pass and to let the Mississippi flood waters enlarge the channel so that gunboats and transports could move down the Yazoo River and get in behind the Vicksburg fortifications. To Grant's dismay, this scheme also proved unsuccessful.

Grant decided to abandon movement north of Vicksburg and bring the greater part of Admiral David C. Porter's fleet below the city. By risking the passage south of "ten shiploads of rations and forage", under cover of Porter's 15 gunboats, Grant seized the initiative. The plan, "too dangerous for the movement of ammunition", worked for rations 16 and other less sensitive cargo.

Grant was now ready to attack Vicksburg's vulnerable southern flank planning to move through the swamps west of the Mississippi to New Carthage. On April 20, Grant issued Special Order No. 110 from his headquarters at Milliken's 17 Bend. His order was much like a logistics annex as we know it today. It specified the supplies each regiment, division, and corps were authorized. In addition, the order specified that one tent would be allowed to each company for the protection of rations from the rain; that all teams of the three corps, under the immediate charge of the

quartermaster bearing them on their return, would constitute a train for carrying supplies and ordnance and the authorized camp equipage of the army; and that two regiments from each army corps would be detailed by corps commanders to guard the 18 the line of communications from Richmond to New Carthage.

Arriving at New Carthage. Grant determined the crossing site to be unsuitable and immediately moved his army further south to Hard Times where he planned to attack Grand Gulf on the opposite bank. Learning that Grand Gulf was strongly defended. Grant again altered his plan. Based on scanty information from a slave that a good road ran eastward from Bruinsburg, he boldly struck out for DeShroon's Landing where Admiral Porter's transports ferried the troops across to Bruinsburg.

Having crossed the Mississippi unopposed. Grant was now in position to strike. As he wrote in his memoirs. "I felt a degree of relief scarcely ever equalled since. I was in enemy country with a vast river and the stronghold of 19 Vicksburg between me and my base of supplies."

Grant chose Major General John A. McClernand's

Thirteenth Corps to be the lead corps, ordering him to "take no wagons" so he could quickly cross the river and secure the 20 eastern bank. Two days rations were authorized for each soldier, but they were to make the rations last for five days for Grant authorized wagons, horses, and food to be taken

from the countryside, as needed. Grant's baggage and supply trains with his own personal belongings, were still west of the river trying to move from Milliken's Bend to Hard Times, some seventy miles below, and he to crossed the river without them. Grant's personal inconvience was colorfully described by Mr. Washburne, Grant's friend and a congressman from Illinois, who asccompanied the expedition. Washburne said Grant took with him "neither a horse, nor a blanket, nor an orderly, nor a camp chest, nor an overcoat, nor even a clean shirt. His entire baggage for six days was a toothbrush. He fared like the commonest soldier in his command, partaking of his rations and sleeping upon the ground, with no covering but the canopy of heaven." Because of the muddy roads, scarcely above the river-line, the trains did not catch up until after the battle at Port Gibson a week later.

Grant's unopposed move to the east bank of the Mississippi, through the Louisiana swamps, was no meager task. The sweep was made possible by "engineers under McClernand who constructed roads and four bridges across bayous, two of the bridges over six hundred feet long, making 23 about two thousand feet of bridging in all." The falling water level made the current in these bayous extremely rapid, increasing the difficulty of building and permanently fastening the bridges, but as Grant mentioned in his memoirs.

The intensity of the Yankee soldier was equal to any 24 energent

The assist in making the move unopposed, enemy attention was diverted by three carefully coordinated deception measures. Grant had Colonel Benjamin H. Grierson, with three regiments of cavalry, conduct one of the war's most successful raids from LaGrange. Tennessee to Baton Rouge. "sweeping 600 miles in seventeen days, capturing 500 men and 1,000 horses, destroying fifty miles of railroad, fighting four engagements," but most important he diverted Pemberton's attention from Grant and drew the Confederate cavalry away 25 from the Vicksburg area. Simultaneously, General Sherman's Fifteenth Corps conducted a demonstration at Haines' Bluff to the north of Vicksburg, while a division under Brigadier General Frederick Steele conducted a feint toward Greenville, creating a rumor that Grant was moving to Memphis to start a new attempt from the north.

Finally, on May 3, with the enemy covering a retreat from Grand Gulf. Grant was in position to establish his supply base at Grand Gulf while "his troops remained in bivouac awaiting fresh ammunition and ration, and the arrival 26 of Sherman's corps." Grant's plan now was to establish himself at Grand Gulf, and dispatch a corps to help Major General Nathaniel P. Banks reduce Port Hudson, the "formidable obstacle that would allow supplies to be brought

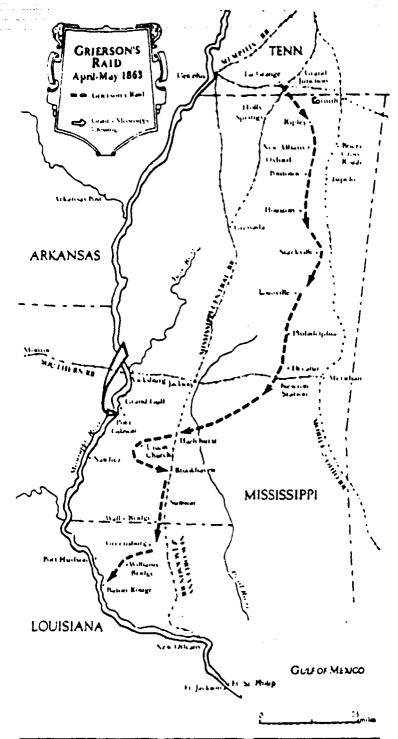


Figure 4. Map of Col. Grierson's Raid April-May 1863. Source: Samuel Carter. III. The Final Fortress:
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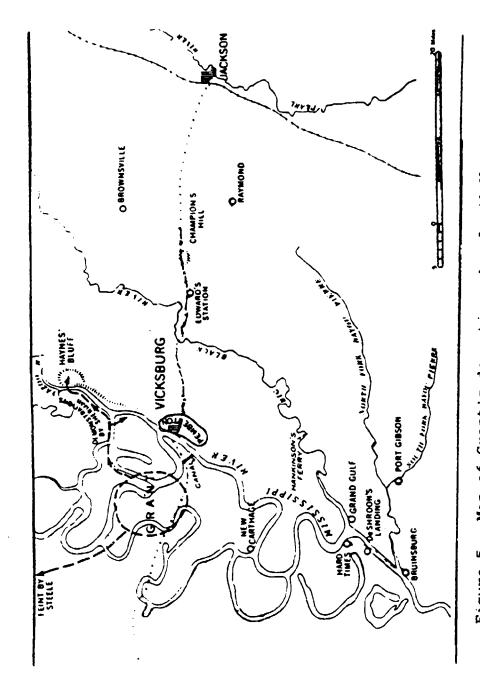


Figure 5. Map of Grant's deception plan April-May 1863. Grant has General Steele conduct a feint toward Greenville while General Sherman conducts a demonstration at Haines' Bluff. Source: Military Engineer, November-December, 1961, 430.

27

up from New Orleans regularly and safely." Still, the vexing question if supply was the only thing keeping Grant from an immediate movement upon Vicksburg. Then, Grant received a dispatch from Banks stating that, "he could not reach Fort 28 Hudson by May 10." Grant knew a delay would be ruinous and decided to move quickly.

Grant's Army of the Tennessee consisted of three corps.

Major General John A. McClernand's Thirteenth Army Corps.

Major General William T. Sherman's Fifteenth Army Corps. and

Major General James B. McPherson's Seventeenth Army Corps.

29

numbering 45.000. while the Confederate army in and around

30

Vicksburg was about 50.000. However, the Confederates had

another army gathering near Jackson. Mississippi and Grant
knew that General Joseph E. Johnston, with additional troops.

was on his way from Chattanooga to take command of the

situation in person.

Pemberton and Cohnston along the railway from Vicksburg and Jackson: a most critical moment upon which the campaign's structure turned. "To face the difficulties in the way of such a movement required the stoutest of hearts and coolest of 32 heads." Grant knew Pemberton was preparing to move against his line of communications with Grand Gulf as soon as he moved eastward against Jackson: therefore, if he detached a force to guard his line of communications he would not have

enough men to ensure victory.

The accomplish his plan. Grant decided to completely out loose from his supply base, forage, and travel unencumbered by heavy wagons for speed and mobility. "No general ever conceived a more daring scheme. It seemed like defying 34' fortune out right." Historians of the campaign say. "Napoleon and other European generals who lived upon the country did so through a regularly organized system of requisitions, but no one had ever undertaken an elaborate campaign in an enemy's country with no more provisions than 35 could be carried in haversacks or be gotten by foraging."

Interestingly enough, "none of Grant's generals approved of 36 his plan." and General Halleck, too late, "forbade it as soon as the news reached Washington."

Having made the decision to attack. Grant directed his commissary and quartermaster officers to collect and prepare over 100,000 pounds of foodstuffs consisting of bacon, salt, 38 sugar, coffee, flour, and hardtack. These supplies were enough to resupply his attacking force of 43,000 men, as well as provide an additional five days supply of rations and 39 ammunition. Grant ordered Sherman to have Brigadier General Francis P. Blair upload and bring 200 wagons of supplies to 40 Grand Gulf from Milliken's Bend for initial staging. Once these provisions were in place at Grand Gulf, the

quartermasters were directed to "fill all requisitions 41 immediately."

Determined to have available ammunition for replenishment in large quantities during the move. Grant ordered all regimental wagons, two per regiment, to be loaded 42 with munitions. In addition, he directed that all other vehicles and draft animals, whether horse, mule, or oxen, in the vicinity be collected and loaded to capacity with ammunition. Grant described this collection of vehicles as 43 manufactories. In the train could be found "fine carriages, loaded nearly to the top with boxes of cartridges that had been pitched in promiscuously; long-couple wagons, and everything that could be found in the way of transportation on a plantation, either for use or 44 pleasure."

Sherman was so skeptical of Grant's plan to give up

Grand Gulf as a supply bare that he sent a message to Grant

"advising him of the impossibility of supplying an army over

45
a single road." Urging Grant to "stop all troops till your

46
army is partially supplied with wagons." Grant replied. "I

do not calculate upon the possibility of supplying the army

with full rations from Grand Gulf. I know it will be

impossible without constructing additional roads. What I do

expect is to get up what rations of hard beard, coffee, and

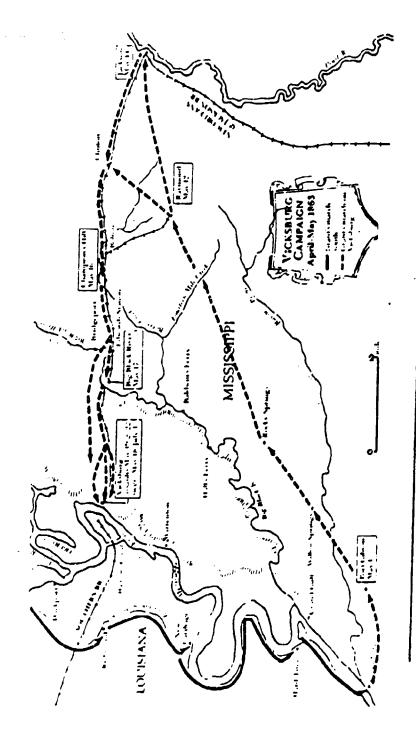
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salt we can and make the country furnish the balance."\*

Frant began his initial movement eastward toward

Jackson, with his soldiers laden down with five days
45
rations. At night, commandeered wagons delivered ammunition
and foodstuffs that had been foraged. Rations were prepared
and distributed to the soldiers as they camped for the
49
night.

After the capture of Jackson on May 14. Grant swept towards Vicksburg. "leaving Sherman to burn the bridges. factories, and arsenals in Jackson and to destroy the 50 railroads in every direction for twenty miles." Grant moved rapidly to prevent Johnston and Pemberton from joining forces. In hindsight, Pemberton should have moved to Clinton and attacked Grant's rear, but he thought attacking Grant's line of communications to Grand Gulf was sound strategy: however, it never occurred to him that Grant would do 51 anything so rash as abandon his supply base. Advancing on a broad front for maximum speed. Grant defeated Pemberton at Champion Hill on May 16. It was that evening that Grant received Halleck's order, dated five days before, directing him. "on no account whatever to undertake such a campaign as 52 this." The next day Grant defeated Pemberton again at Big

<sup>\*</sup>Editorial Note: It is interesting to note that Sherman, afterwards, ignored bases of supply, other than those afforded by the country, while marching through four states with an army twice as large as Grant's.



1863. Source: Samuel Carter, III. The Final Fortress: The Campaign for Vicksburg 1862-63, St. Martins Press New York, Map of General Grant's movements April-May Figure 6. Map 1863. Source:

Black Ri er making it possible for an uninterrupted advance towards landskaburg.

Vicksburg. Grant took Sherman to Haines: Bluff for a talk. It was there that Sherman said to Grant. "Until this moment. I never thought your movement a success, but this is a campaign! This is a success, if we never take the town."

Grant took out a fresh digar and lit it, smiled, and never said a word. The following day, just twenty days after crossing the Mississippi, the city of Vicksburg, the unapproachable "Confederate Gibraltar," was completely invested. Grant's lines were now drawn around the city, and the bluffs that had baffled him for so many months now guarded his new base of supplies.

Finally, after a forty-seven day siege, Pemberton, at the end of his resources, and hopeless of relief, surrendered his army and the city of Vicksburg on July 4.

1863. Now the Confederacy was hopelessly divided and in the striking words of President Lincoln, "the Father of 55 Waters roles unvexed to the sea." Sherman, who "knew nothing about subsisting an army away from its base of supply 56 before Vicksburg," was educated and ready to march to the sea. Grant was promoted to Major General of the Regular Army and placed at the head of all the Union armies.

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- 56. Howard, 32.

## CHAPTER VI

## CONCLUSION

There is a prevalent opinion that tacticians and strategists win battles and, in the end, wars. Both current and past combat leaders dwell upon their successes and, if the issue of logistics is mentioned, it is done so with disdain. In final analysis, Grant achieved his objective. not only by maneuver, deception, and force of arms, but also by logistic genius. His logistic success was achieved by his bold decision to abandon the traditional resupply methods of that day. This gave him the speed and freedom his army needed to march 200 miles in 20 days. It freed the manpower needed to protect a long line of communications so that he could defeat two armies in five battles. In addition, he was able to maneuver more rapidly without being confined to the road network for vehicles. This further enabled his army to live off the country. Secondly, by deviating from the standard procedure used by armies of the day. Grant confused and deceived Pemberton into unwisely splitting his force in an effort to find and destroy his non-existent lines of communication. The significance of Grant's brilliant preparation and foresight for logistics cannot be overemphasized and are inseparable factors in his equally brilliant tactical plan and bold execution that not only was the turning point of his career, but of the Civil War.

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